State of Hawaii, Agribusiness Development Corporation

Kekaha Emergency Generator Installation Project – Q&A Hand-out / September, 2011

Q: Who is the Agribusiness Development Corporation?

A: The State of Hawaii, Agribusiness Development Corporation (ADC) is a state agency established in 1994 and responsible for control and management of various, large tract agricultural land and water projects in the state of Hawaii, including the Kekaha Agricultural Lands in west Kauai.

Q: Who is the Kekaha Agricultural Association?

The Kekaha Agricultural Association (KAA) is a farmer's cooperative made up of the existing ADC land tenants. The KAA has an agreement with ADC to maintain and manage the common areas and infrastructure of the Kekaha Agricultural Lands.

Q: What is the importance of the Kekaha Agricultural Lands to the local community?

A: 1) The farming tenants, who are also KAA members, provide much needed jobs for the community (most recent estimate 400 full time jobs, not including part-time and contractor jobs).

2) The Kekaha Agricultural Lands electrical system, including two hydropower plants, powers pump stations that manage water levels in streams and ditches and prevents Kekaha as well as the Navy's Pacific Missile Range Facility from flooding during major storm events.

Q: Why is this generator project important to the Kekaha agricultural lands?

A: 1) The generators will provide back-up emergency power if one or both of the hydropower plants fails, providing extra protection against flooding.

2) The generators will be an important source of electrical grounding and reduce the chance of a power failure at the hydropower plants.

Q: Does this project have anything to do with the Kekaha Sugar Mill site?

A: ADC has no ownership or responsibility for the former sugar mill, which is on privately owned land. The generator installation site is located across the street from the old mill on land formerly used by the Kekaha Sugar Co. Soil contamination at the Kekaha sugar mill site is being investigated and managed under a separate project.

Q: What types of environmental studies were done for the ADC site project?

A:
1) Environmental Assessment– April 2010
2) Phase II Environmental Site Assessment (ESA), Kekaha, Kauai – Oct 2010
3) Phase I/Phase II Investigation, Targeted Brownfields Assessment, Kekaha Sugar Mill - June 2011 (included sampling at the ADC site)
4) Remedial Action Work Plan - August 2011 (pending public input and DOH approval)
5) Environmental Hazard Management Plan (interim, to be finalized after selection of final remedial alternative).

Q: What soil contamination issues were identified?

A: Studies carried out as part of Environmental Assessment and communication with the Hawaii State Department of Health (DOH) revealed that Kekaha Sugar Co. had operated a pesticide mixing facility on the ADC site in the past. Results of the Phase II sampling conducted by ADC's consultant (TEC Inc) identified low to moderate contamination of the soil by dioxin and arsenic. Reported level of dioxin and arsenic are considered by HDOH to be acceptable for the planned use of the property and not pose a significant health risk to future workers. Access to the site and exposure to the soil by the general public should be minimized, however.

Q: What are dioxins and arsenic?

Dioxins are unintended byproducts formed when materials containing chlorine or chloride are burned or otherwise heated to high temperatures, for example during chlorine bleaching of pulp and paper or during the manufacture of pesticides and other chemicals. The dioxin at the site is believed to be associated with a pesticide (pentachlorophenol) used during the 1940s through 1960s.

Arsenic is a naturally occurring element in the earth's crust and is naturally present at low concentrations in soils. The presence of elevated levels of soil arsenic at some historic sugar plantation areas is related to the use of sodium arsenite (an inorganic arsenic compound) or other arsenic-based herbicides/pesticides in and around the cane fields from the 1910s through1940s. For more information please see DOH's fact sheet *Arsenic in Hawaiian Soils-Questions and Answers on Health Concerns* (internet: http://hawaii.gov/health/environmental/hazard/docs/soilarsenicfactsheetfinal_revheadermar2011.pdf).

Q: What is the danger or risk of arsenic or dioxin leaching into the groundwater?

A: Both contaminants are immobile in Hawaiian soils because they bind strongly to the soils and are only weakly insoluble in water. They do not pose a risk or danger of leaching into groundwater at the ADC site.

Q: What are the potential risks to human health?

A: The reported levels of dioxin and arsenic in soil at the site do not pose a significant health risk for future, on-site workers that may inadvertently be exposed to the soil on a regular basis. Potential exposure would come from inadvertent ingestion of soil (i.e., eating), or inhalation of dust particles. The reported levels of dioxin and arsenic exceed concentrations that HDOH considers to be acceptable for residential properties, where small children could come into regular contact with the soil during play activity. Under current plans, fencing will be placed around the majority of the ADC site to restrict access. Soil outside of the fenced area will be capped with 3-4" of gravel in order to limit potential exposure of residents who may walk through the area. The fencing and gravel caps will be maintained by ADC under a long-term, Environmental Hazard Management Plan

Q: What is ADC doing to address the risks?

A: 1) ADC is working closely with HDOH to investigate the site and review potential remediation alternatives. ADC will implement the selected mitigation measure under the oversight of HDOH.
2) The generators will be placed in the least-impacted area of the site to minimize as an added measure of protection for future workers.
3) A Remedial Action Work Plan has been prepared and is waiting final approval by HDOH, pending input from the local community.
4) Following implementation of the selected remedial action, a Final Environmental Hazard Management Plan will be prepared and approved by HDOH to manage contamination at the site and minimize risk to on-site workers and the nearby neighborhood.

Due to public interest in the site, DOH will be conducting a public review period from September 12 to October 12. The Remedial Action Work Plan and the Environmental Hazard Management Plan will be available on the HDOH website at http://hawaii.gov/health/environmental/hazard/index.html .

The following long-term, site management work is proposed in the Remedial Action Work Plan:

- Signage and security monitoring of the site to keep trespassers out.
- Placing boulders and installing a cattle fence to prevent access of vehicles and trespassers into the site.
- Retaining the current, natural site depression to minimize stormwater runoff to adjacent properties.
- Graveling project site access roads where vegetation will not be maintained. This will provide a barrier to contaminants, deter stormwater run-off, and suppress dust, followed by long-term maintenance of gravel and vegetation areas.

(continued from page 2)

- No excavation or off-site movement of soil is proposed. Long-term, onsite management of soil is considered to be protective of human health.

Q: Why should the community want this project to get started as soon as possible?
A: 1) No controls are currently in place on the site to prevent or minimize exposure to the contaminated soils. Instituting soil management controls will provide long-term protection against exposure to affected soils and allow safe re-use of the property. Dust from the site under current conditions does not pose a significant risk to nearby residential areas due to the relatively low levels of contaminants in the soil. Gravel capping and other measures planned will reduce potential dust concerns as an added measure of protection.
2) The emergency generators will provide a flood-prevention mechanism and help maintain the hydroelectric plants.
3) As soon as this project is started, construction measures identified in the Final Environmental Hazard Management Plan will be implemented to protect human health. When the project is completed, measures identified in this plan will be put in place to ensure long-term management of the site and minimize risks to the community.

QUESTIONS regarding this fact sheet can be directed to Matthew Rose of ADC staff via e-mail to matthew.rose@hawaii.gov or phone at 808-586-0181.